

What is claimed is:

1.           A transmission power control apparatus  
2   comprising:  
3           extraction means for extracting a transmission  
4   power control signal from a reception signal containing  
5   a transmission power control signal;  
6           storage means for sequentially storing  
7   transmission power control signals output from said  
8   extraction means;  
9           first determination means for determining  
10   whether an instruction to increase/decrease transmission  
11   power based on a plurality of transmission power control  
12   signals stored in said storage means is repeatedly  
13   generated; and  
14           update stopping means for stopping  
15   transmission power updating operation if the  
16   determination result from said first determination means  
17   indicates that the transmission power is repeatedly  
18   increased/decreased.

2.           An apparatus according to claim 1, wherein  
2   said extraction means, storage means, first  
3   determination means, and update stopping means are  
4   arranged in a CDMA (Code Division Multiple Access)  
5   mobile terminal.

3.           An apparatus according to claim 1, wherein  
2           said apparatus further comprises second  
3           determination means for determining whether a deviation  
4           of a frequency of a reception wave due to the Doppler  
5           effect is not more than a predetermined value, if the  
6           determination result from said first determination means  
7           indicates that the transmission power is repeatedly  
8           increased/decreased, and  
9           said update stopping means stops transmission  
10          power updating operation if the determination result  
11          from said second determination means indicates that the  
12          deviation is not more than the predetermined value.

4.           An apparatus according to claim 3, wherein  
2           said extraction means, storage means, first and second  
3           determination means, and update stopping means are  
4           arranged in a CDMA (Code Division Multiple Access)  
5           mobile terminal.

5.           An apparatus according to claim 3, further  
2           comprising Doppler effect measuring means for comparing  
3           a slot period of a reception signal with a reference  
4           slot period to measure a slot period deviation of a  
5           reception wave due to the Doppler effect which is  
6           produced upon movement of the terminal.

6.           An apparatus according to claim 1, wherein

2           said first determination means determines  
3 whether a predetermined frequency component of frequency  
4 components obtained by Fourier-transforming a plurality  
5 of transmission power control signals stored in said  
6 storage means is not more than a predetermined value,  
7 and

8           said update stopping means stops transmission  
9 power updating operation if the determination result  
10 from said first determination means indicates that the  
11 predetermined frequency component is not more than the  
12 predetermined value.

7.           A transmission power control method comprising  
2 the steps of:

3           extracting a transmission power control signal  
4 from a reception signal containing a transmission power  
5 control signal;

6           sequentially storing extracted transmission  
7 power control signals;

8           determining whether an instruction to  
9 increase/decrease transmission power based on a  
10 plurality of stored transmission power control signals  
11 is repeatedly generated; and

12           stopping transmission power updating operation  
13 if the transmission power is repeatedly  
14 increased/decreased.

8. A method according to claim 7, wherein

2 the method further comprises the step of  
3 determining whether a deviation of a frequency of a  
4 reception wave due to the Doppler effect is not more  
5 than a predetermined value, if the transmission power is  
6 repeatedly increased/decreased, and

7 the step of stopping comprises the step of  
8 stopping transmission power updating operation if the  
9 deviation is not more than the predetermined value.

9. A method according to claim 8, further

2 comprising the step of comparing a slot period of a  
3 reception signal with a reference slot period to measure  
4 a slot period deviation of a reception wave due to the  
5 Doppler effect which is produced upon movement of the  
6 terminal.

10. A method according to claim 7, wherein

2 the step of determining comprises the step of  
3 determining whether a predetermined frequency component  
4 of frequency components obtained by Fourier-transforming  
5 a plurality of stored transmission power control signals  
6 is not more than a predetermined value, and  
7 in the step of stopping, transmission power  
8 updating operation is stopped if the predetermined  
9 frequency component is not more than the predetermined  
10 value.